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REMARKS

Applicants deeply appreciate the indication that Claims 5-10 are allowable if rewritten in independent form to include the limitations of the base claim and any intervening claims. Claims 5-10 have been amended accordingly and are respectfully believed to be in condition for allowance. Minor modifications have been made to provide consistency and clarity. No new matter is added.

Rejection under 35 U.S.C. Section 102(b)

Claim 1 was rejected under 35 U.S.C. Section 102(b) as being anticipated by Little et al. (U.S. Patent No. 3,277,511). Little et al., as illustrated in FIGS. 7 and 9, shows that the head pivots in a cantilevered action around one of the brush heads. As recited in Column 8, Lines 17-21: "Thus as the vehicle or machine 50 is moved longitudinally of the position 201', different and lesser width swaths or paths are scrubbed by the head 200 in each of the different angular positions, 201, 201'', and 201''', respectively."

This presents a marked contrast to Applicant's claimed Invention which requires in amended Claim 1: "...the head having a pivotal connection with the lift unit for rotation of the head on a generally vertical pivot axis in the plane and generally at the center of length of the head for rotation of the head on the axis to different angular positions with respect to the plane;...". Therefore, the pivoting occurs at approximately the center of the length of the head and not around one of the brushes as disclosed in Little et al. Pivoting around the center provides an important advantage since it reduces manufacturing costs and provides an ease of maintenance and operation. This is due to the fact that the weight load is symmetrically

balanced across the full length of the head and does not involve cantilevered action from an off-center pivot point.

Moreover, every ninety (90) degree rotation of the head allows the operator of the machine to go from minimum to maximum floor coverage by going from vertical alignment of the brushes (one brush width) to horizontal alignment of the brushes for the full coverage using the full width of both brushes. This increases the speed and ability for the operator to change floor surface treatment coverage with minimal rotation of the head.

It is now a basic tenet of patent law that the results and advantages produced by the claimed subject matter, of which the prior art is devoid, cannot be ignored simply because the claim limitations are similar to the otherwise barren prior art. It is respectfully believed that patentability of the claimed subject matter must be determined in view of the invention "as a whole." Moreover, for a valid 35 U.S.C. Section 102 rejection, it is respectfully believed that a single reference must teach each and every element of the rejected claim. In this case, the pivoting of the head generally about the center of length of the head is a completely missing element that provides significant advantages not found in Little et al.

Moreover, proper application of a reference against a device described and claimed in a patent application requires broadly that the anticipatory device be substantially the same as the anticipated device in structure, function and result. In this case the structure is different since the head in Little et al. **does not** rotate generally about the **center of the length of the head**. The Applicant's Invention, as claimed, eliminates the stress and associated maintenance expense of using cantilevered action to rotate a first brush in relation to a second brush. The Applicant's Invention, as claimed, provides a significant advantage that does not teach the source of the

problem created by a cantilevered pivoting of the head nor the slightest hint or suggestion as to the solution. Moreover, there is not the slightest teaching, suggestion or incentive to modify the disclosed device found in Little et al.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102 (b) as being unpatentable over Little et al.

Claims 2-4 and 11-12 were also rejected under 35 U.S.C. Section 102(b) as being anticipated over Little et al. Since Claims 2-4 and 11-12 depend from and contain all of the limitations of Claim 1, Claims 2-4 and 11-12 are felt to distinguish from Little et al. in the same manner as Claim 1.

Claim 1 was also rejected under 35 U.S.C. Section 102(b) as being anticipated by Geyer at al. (U.S. Patent No. 5,016,310). Geyer discloses in Column 2, Lines 14-20, the following:

“The scrub head assembly is attached to the scrubber frame with **two parallel ball jointed links on each side**, which pull it along. These links allow it to be lifted for transport or lowered to the floor for working, and to follow an uneven floor. They also allow it to move from **side to side**.”

Therefore the pivoting of the head occurs though two links attached to each side of the head and does not pivot generally about the center of the length of the head as required in Applicant's Claim 1.

Once again, there are maintenance and manufacturing expense issues due to the fact that a complicated dual link structure is required in Geyer et al. and only one link has to stop operating to eliminate any pivoting of the head. Pivoting of the head does not occur generally about the center of the length of the head as recited in Applicant's Claim 1.

The source of the problem involving the cost of manufacturing and maintenance of pivoting the head from a point that is not generally the center of the head was not known prior to the Applicant's Invention. It is respectfully believed ever since Eibel Process Co. v. Minnesota and Ontario Paper Co., 261 U.S. 45 (1923), that the Federal Court of Appeals for the Federal Circuit as well as the United States Patent Office has recognized the longstanding rule that discovery of the source of the problem is patentable even if the solution is deemed obvious (which is not the present situation).

As previously stated, a basic tenet of patent law is that the results and advantages produced by the claimed subject matter, of which the prior art is devoid, cannot be ignored simply because the claim limitations are similar to the otherwise barren prior art. It is respectfully believed that patentability of the claimed subject matter must be determined in view of the invention "as a whole." For a valid 35 U.S.C. Section 102 rejection, it is respectfully believed that a single reference must teach each and every element of the rejected claim. In this case, the pivoting of the head generally about the center of the length of the head is a completely missing element that provides significant advantages not found in Geyer et al.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102 (b) as being unpatentable over Geyer et al.

Claims 2-4 and 13 were also rejected under 35 U.S.C. Section 102(b) as being anticipated over Geyer et al. Since Claims 2-4 and 13 depend from and contain all of the limitations of Claim 1, Claims 2-4 and 13 are felt to distinguish from Geyer et al. in the same manner as Claim 1. Claim 13 was modified slightly to provide greater clarity. No new matter is added.

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Claim 1 was rejected under 35 U.S.C. Section 102(b) as being anticipated by Wilson et al. (U.S. Patent No. 3,345,671). Wilson discloses in Claim 1, Column 4, Lines 45-52, the following: "...said outer brushes having supporting arms pivotally mounted on said frame to swing about an axis substantially on the center line of the frame, between a wide position with the three brushes in substantially **linear arrangement transversely of the frame** and a narrow position with the brushes in **generally triangular arrangement**...." As shown in FIGS. 2 and 4, there are two outer brushes that are projecting in a cantilevered relationship to a middle brush, but the head as defined as the frame that includes all three brushes does not pivot generally around the center of the length of the head, as shown in FIG. 4, but off to the right side of the head. In this case, we have a very complicated mechanical structure with drive belts 54 and mechanical arms. Once again, the manufacturing and maintenance costs are significantly higher than the Applicant's Invention, as recited in Claim 1.

It is respectfully believed that proper application of a reference against a device described and claimed in a patent application requires broadly that the anticipatory device be substantially the same as the anticipated device in structure, function and result. In this case, the structure disclosed in Wilson et al. is very different and there is no pivoting about the center of the head but cantilevered movement of the two outer brushes in relationship to the middle brush. Since Wilson et al. does not disclose or suggest pivoting of the head generally around the center, the problem of the manufacturing and maintenance expense of the cantilevered brush heads is neither recognized nor solved by Wilson et al. In addition, hindsight is not the test of anticipation nor is it alone sufficient that other disclosed devices might have been adapted

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without too much difficulty to produce the object and function of Applicant's Invention, as claimed.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102 (b) as being unpatentable over Wilson et al.

Claim 1 was rejected under 35 U.S.C. Section 102(b) as being anticipated by Swisher, Jr. et al. (U.S. Patent No. 4,290,820). Swisher Jr., et al. in Column 6, Lines 35-46, discloses the following: "The parallel brush assembly 98 comprises **a first forward brush assembly 100 and a second forward brush assembly 102**. The first forward brush assembly 100 is supported from the first side member 48 of the brush-supporting forward subframe 46; and the second forward brush assembly 102 is supported from the second side member 50 of the brush-supporting forward subframe 46. The first forward brush assembly 100 comprises a right or first forward brush 104 of the type sometimes referred to as a gutter brush, and a hydraulic motor 106 connected to a brush shaft." As shown in FIG. 3, there is no real head assembly with each brush projecting and **each pivoting from a separate point on the frame in a cantilevered manner**. The concept of the head pivoting generally about the center of the head is wholly absent from Swisher, Jr. et al.

It is respectfully believed that proper application of a reference against a device described and claimed in a patent application requires broadly that the anticipatory device be substantially the same as the anticipated device in structure, function and result. In this case, the structure disclosed in Swisher, Jr. et al. is very different and there is no pivoting about the center of the length of the head but cantilevered movement of the two outer brushes from the end points of a frame. The problem of operational and maintenance costs, problems and expenditures due to

cantilevered pivoting of rotating brushes is not disclosed nor suggested in by Swisher, Jr. et al. and that as a result, the feature of pivoting the head about the center of its length is neither recognized nor solved by Swisher, Jr. et al.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102 (b) as being unpatentable over Swisher, Jr. et al.

Claim 1 was rejected under 35 U.S.C. Section 102(b) as being anticipated by Veselka. (U.S. Patent No. 4,691,402). Vselka discloses in the Abstract: "A gutter broom mechanism is adapted to be carried by the frame of a mobile road or like surface sweeping machine, a gutter broom **carried by a first end of an arm having a second end mounted to the frame** for movement such that the gutter broom can be moved between a first elevated position generally adjacent the frame and a second lower position generally outward of the frame in brushing engagement with a surface to be swept, **the arm carrying a ball joint/yoke to which a threaded bolt is connected by a first pivot pin**, the bolt passes through a collar having a spherical socket receiving a spherical surface of the yoke, the threaded bolt being connected by a nut to a bracket supporting a rotary gutter broom, and the threaded bolt and nut defining a single locking mechanism for holding the gutter broom in anyone of a plurality of predetermined positions of angular adjustment relative to an associated gutter or similar surface being swept." Therefore, once again, the pivoting is a cantilevered action from a point on a frame and **not at generally the center of the length for the head**. As with the other cited References, the mechanical, cantilevered arm is expensive to manufacture and maintain in relationship to the Applicant's Invention as claimed.

It is now a basic tenet of patent law that the results and advantages produced by the claimed subject matter, of which the prior art is devoid, cannot be ignored simply because the claim limitations are similar to the otherwise barren prior art. It is respectfully believed that patentability of the claimed subject matter must be determined in view of the invention "as a whole." Moreover, for a valid 35 U.S.C. Section 102 rejection, it is respectfully believed that a single reference must teach each and every element of the rejected claim. In this case, the significant advantages provided by pivoting the head generally around the center of the length of the head are wholly absent from Veselka.

Moreover, it is respectfully believed that all claim limitations and functional language must be considered and cannot be ignored. The Federal Circuit has long held that a key element in the claim, not found in the directly pertinent prior art, cannot be ignored in the face of the fact that it led to the successful results produced by the device. In this case, the element and function of, by pivoting the head generally around the center of the length of the head, is wholly absent from Veselka. Moreover, it is now a basic tenet of patent law that the United States Patent Office is not permitted to ignore the results and advantages of the claimed subject matter, of which the prior art is devoid, simply because the claim limitations are similar to the otherwise barren prior art. In this case, the limitation in Applicant's Claim 1 is very dissimilar to the disclosure of Veselka wherein Veselka disclosed cantilevered gutter brooms operated by a street sweeping machine.

In addition, it is respectfully believed, that the United States Patent Office and the Federal Court of Appeals for the Federal Circuit, has steadfastly and properly held the view that for a proper 35 U.S.C. Section 102 rejection, a single reference, i.e., Veselka, must identically

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describe each and every element of the rejected claim or else the claim fails as a proper rejection under this statute. In this case, the concept of pivoting the head about the center of the head's length is a concept wholly absent from Veselka since Veselka disclosed two projecting gutter brooms from the front of a street sweeper and does not really even disclose a head.

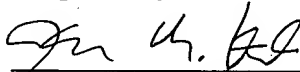
Therefore as a result, Claim 1 overcomes the rejection under 35 U.S.C. Section 102 (b) as being unpatentable over Veselka.

It is now believed that all of the pending claims in the present application, namely, Claims 1-13 are in condition for allowance. Favorable action and allowance of the claims is therefore respectfully requested.

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding this amendment, it is respectfully requested that Examiner please telephone the Applicant's undersigned attorney in this regard.

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Respectfully submitted,



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